

RA09-058

Facility Operating License -Appendix B

July 22, 2009

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

LaSalle County Station, Units 1 and 2  
Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373 and 50-374

Subject: Environmental Non-Routine Event Report - LaSalle County Station

In accordance with the 30-day notification requirements of Facility Operating Licenses NPF-11 and NPF-18, Appendix B, Environmental Protection Plan, Sections 4.1 and 5.4.2, LaSalle County Station is submitting this Environmental Non-Routine Event Report on a fish loss that occurred on the LaSalle Cooling Lake.

### Event Description

On June 23, 2009 at 1249 CST, a fish loss above normal mortality was identified on the station cooling lake. The Illinois Department of Natural Resources (IDNR) was notified and an ENS notification was made pursuant to 10 CFR 50.72 (b)(2)(xi). The IDNR District Biologist performed an official fish count. Mortality distribution was as follows:

<u>Species</u>	<u>Count</u>	<u>Comments</u>
Gizzard Shad	3,000 – 4,000 (est)	IDNR did not perform an official count. This is a foraging species.
Smallmouth Bass	26	
Striped Bass	4	
Walleye	4	

### Analysis and Evaluation

During the period of June 20-23, 2009, Units 1 and 2 were operating at full power. Six circulating water pumps provided lake circulation (approximately 1.2 million gallons per minute). Two lake makeup pumps (approximately 60,000 gallons per minute) provided makeup from the Illinois River with blowdown return to the Illinois River operating at approximately 32,500 gallons per minute.

Lake temperature increased ten degrees Fahrenheit from 83 dF on June 20 to 93 dF on June 23. The fairly rapid increase is attributed to high air temperatures, low wind speed, and high dew point temperatures and is believed to have provoked the fish loss.

The cooling lake is classified as a treatment facility for the dissipation of waste heat per the station's NPDES Permit No. IL0048151 issued by the Illinois Environmental Protection Agency.

In accordance with the permit, no state or federal water quality standards are applicable to the lake itself. Effluent, thermal and chemical standards are applied to the lake blowdown effluents to the Illinois River. None of these standards were violated during this period.

#### Probable Cause of Event

The apparent cause was that a combination of high air temperatures, low wind speeds, and high dew points, led to a rapid increase in Cooling Lake temperature. (83 dF to 93 dF over 3 days). When the thermal transient occurred, some cool water species and weaker fish succumbed to the heat distress.

#### Corrective Actions

The public recreation area boat launches and shad net areas were cleared of the fish. Inspections showed no fish were present in the Lake Screen House traveling screens. Inspection of the blowdown canal to the Illinois River revealed no problems with fish or nuisance odors being discharged.

#### Actions to Prevent Recurrence

There are no actions to prevent recurrence. These events are expected to periodically occur and are accounted for in the LaSalle Extreme Heat Implementation Plan.

#### Agencies Notified and Preliminary Responses

The Illinois Department of Natural Resources was notified of the fish loss. Their preliminary response was to perform a fish count to determine the extent of the loss and the species affected.

If there are any questions or comments concerning this letter, please refer them to Terrence W. Simpkin, Regulatory Assurance Manager, at (815) 415-2800.

Respectfully,



David Rhoades  
Plant Manager  
LaSalle County Station

cc: Regional Administrator - NRC Region III  
NRC Senior Resident Inspector - LaSalle County Station